VOL. 118, ISSUES 1–3 14 FEBRUARY 2005

JOURNAL OF HAZARDOUS MATERIALS

(Abstracted/indexed in: Applied Science and Technology Abstracts, ASM International/The Institute of Metals – Materials Information, Cambridge Scientific Abstracts, Centre de Documentation Scientifique et Technique – PASCAL database, Chemical Abstracts, CIS Documentation, Coal Abstracts, Current Contents (Engineering Technology and Applied Sciences), DECHEMA, Germany, Elsevier BIOBASE/Current Awareness in Biological Sciences, EMBASE/Excerpta Medica, Engineering Index Abstracts, Environmental Periodicals Bibliography, Geo Abstracts, GEOBASE, Laboratory Hazards Bulletin/Chemical Hazards in Industry, NIOSHTIC, Système de Documentation et Information Métallurgique)

CONTENTS

Part A: Risk Assessment and Management

Safety assessment methodology in management of spent sealed sources
N.S. Mahmoud (Cairo, Egypt) 1

An advanced approach to reactivity rating
A. Kossoy, A. Benin and Yu. Akhmetshin (St. Petersburg, Russia) 9

Explosive decomposition of ethylene oxide at elevated condition: effect of ignition energy, nitrogen dilution, and turbulence
A.A. Pekalski, J.F. Zevenbergen (Delft, The Netherlands), M. Braithwaite (Shrivenham, UK), S.M. Lemkowitz and H.J. Pasman (Delft, The Netherlands) 19

Factors affecting the transformation of a pyritic tailing: scaled-up column tests
C. García, A. Ballester, F. González and M.L. Blázquez (Madrid, Spain) 35

Influence of the experimental conditions on porosity and structure of adsorbents elaborated from Moroccan oil shale of Timahdit by chemical activation
S. Ichcho, E. Khouya, S. Fakhi, M. Ezzine, H. Hannache (Casablanca, Morocco), R. Pallier and R. Naslain (Pessac, France) 45

Revised estimates for continuous shoreline fumigation: a PDF approach
M. Nazir, F.I. Khan and T. Husain (St. John's, Canada) 53

An ab initio study on ethylenedinitramine and its monovalent ions
L. Türker (Ankara, Turkey) 67

Short communication

Studies on energetic compounds. Part 45. Synthesis and crystal structure of disodium azotetrazole pentahydrate
G. Singh, R. Prajapati (Gorakhpur, India) and R. Frohlich (Munster, Germany) 75

Part B: Environmental Technologies

Use of clay mineral (montmorillonite) for reducing poultry litter leachate toxicity (EC_{50})
G. Gupta and W. Gardner (Princess Anne, MD, USA) 81

Comparison treatment of various chlorophenols by electro-Fenton method: relationship between chlorine content and degradation
Y. Song-hu and L. Xiao-hua (Wuhan, PR China) 85

Enhanced electrokinetic extraction of heavy metals from soils assisted by ion exchange membranes
W.-S. Kim (Gwangju, Republic of Korea), S.-O. Kim (Jinju, Republic of Korea), and K.-W. Kim (Gwangju, Republic of Korea) 93

Reactivity of Fe(II)/cement systems in dechlorinating chlorinated ethylenes
I. Hwang (Busan, Republic of Korea), H.-J. Park, W.-H. Kang and J.-Y. Park (Seoul, Republic of Korea) 103

Bioremediation of chromium contaminated soil: optimization of operating parameters under laboratory conditions
J. Jeyasingh and L. Philip (Chennai, India) 113

Application of the electrokinetic-Fenton process for the remediation of kaolinite contaminated with phenanthrene
S.-S. Kim (Kyunggi-do, South Korea), J.-H. Kim (Daejeon, South Korea) and S.-J. Han (Kyunggi-do, South Korea) 121

Removal and preconcentration of inorganic and methyl mercury from aqueous media using a sorbent prepared from the plant *Coriandrum sativum*
D. Karunasagar, M.V. Balarama Krishna, S.V. Rao and J. Arunachalam (Hyderabad, India) 133

Rate studies on the adsorption of some dyestuffs and *p*-nitrophenol by chitosan and monocarboxymethylated(mcm)-chitosan from aqueous solution
İ. Uzun and F. Güzel (Diyarbakir, Turkey) 141

(Contents continued on page 272)

SCIENCE DIRECT®

Full text of this journal is available, on-line from **ScienceDirect**. Visit **www.sciencedirect.com** for more information.

0304-3894(20050214)118:1-3;1-1

05162

(Continued from outside back cover)

Photooxidative degradation of Acid Red 27 in a tubular continuous-flow photoreactor: influence of operational parameters and mineralization products
N. Daneshvar (Tabriz, Islamic Republic of Iran), M. Rabbani (Tehran, Islamic Republic of Iran), N. Modirshahla (Tabriz, Islamic Republic of Iran) and M.A. Behnajady (Tehran, Islamic Republic of Iran) 155
Influence of soil components on adsorption–desorption of hazardous organics-development of low cost technology for reclamation of hazardous waste dumpsites
Z. Khan and Y. Anjaneyulu (Hyderabad, India) 161
Application of a new electrolyte circulation method for the ex situ electrokinetic bioremediation of a laboratory-prepared pentadecane contaminated kaolinite
S.-J. Kim, J.-Y. Park, Y.-J. Lee, J.-Y. Lee and J.-W. Yang (Daejeon, Republic of Korea) 171
Decomposition of 2-naphthalenesulfonate in electroplating solution by ozonation with UV radiation
Y.-H. Chen, C.-Y. Chang, S.-F. Huang, N.-C. Shang (Taipei, Taiwan), C.-Y. Chiu (I-Lan, Taiwan), Y.-H. Yu, P.-C. Chiang (Taipei, Taiwan), J.-L. Shie and C.-S. Chiou (I-Lan, Taiwan) 177
A SEM and X-ray study for investigation of solidified/stabilized arsenic–iron hydroxide sludge
T. Phenrat (Bangkok, Thailand), T.F. Marhaba (Newark, NJ, USA) and M. Rachakornkij (Bangkok, Thailand) 185
Electrochemical-assisted photodegradation of dye on TiO_2 thin films: investigation on the effect of operational parameters
Z. Zainal, C.Y. Lee, M.Z. Hussein, A. Kassim and N.A. Yusof (Selangor Darul Ehsan, Malaysia) 197
Effects of gap size and UV dosage on decolorization of C.I. Acid Blue 113 wastewater in the UV/H_2O_2 process
H.-Y. Shu, M.-C. Chang and H.-J. Fan (Taichung, Taiwan) 205
Flocculation behaviour of model textile wastewater treated with a food grade polysaccharide
A. Mishra and M. Bajpai (Kanpur, India) 213
Study on the photocatalysis performance and degradation kinetics of X-3B over modified titanium dioxide
X.-H. Qi (Tianjin, PR China), Z.-H. Wang (Taizhou, PR China), Y.-Y. Zhuang (Tianjin, PR China), Y. Yu and J.- Li (Wuhan, PR China) 219
Model applications and mechanism study on the degradation of atrazine by Fenton's system
K.H. Chan and W. Chu (Kowloon, Hong Kong) 227
Modeling of chlorophenols competitive adsorption on soils by means of the ideal adsorbed solution theory
R. Baciocchi, M.R. Boni and R. Lavecchia (Roma, Italy) 239

Short communications
Biodegradation of fenoxaprop-*p*-ethyl by bacteria isolated from sludge
L. Song (Hefei, China and Shanghai, China), R. Hua (Hefei, China) and Y. Zhao (Shanghai, China) 247
Comment on "Nitrate removal from aqueous solution by adsorption onto various materials" by N. Öztürk, T.E. Bektaş
Y.-S. Ho (Taipei, Taiwan) 253
Effect of fatty oil dispersion on oil-containing wastewater treatment
T. Matsui (Okinawa, Japan), A. Miura, T. Iiyama (Saitama, Japan), N. Shinzato (Okinawa, Japan), H. Matsuda and K. Furuhashi (Saitama, Japan) 255
Production of activated carbon from a new precursor molasses by activation with sulphuric acid
K. Legrouri, E. Khouya, M. Ezzine, H. Hannache (Casablanca, Maroc), R. Denoyel (Marseille, France), R. Pallier and R. Naslain (Bordeaux, France) 259

Correspondence
Reply to comment of Dr. Ho on "J. Hazard. Mater. 108 (2004) 183–188"
O. Gulnaz (Adana, Turkey) 265

Book reviews 267